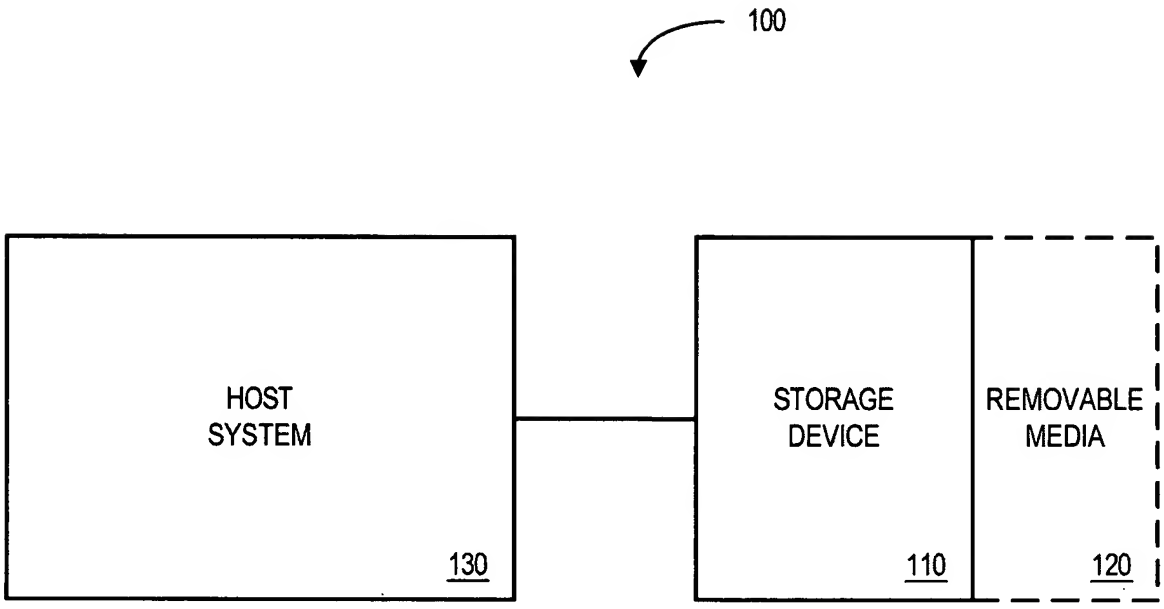

FIG. 1

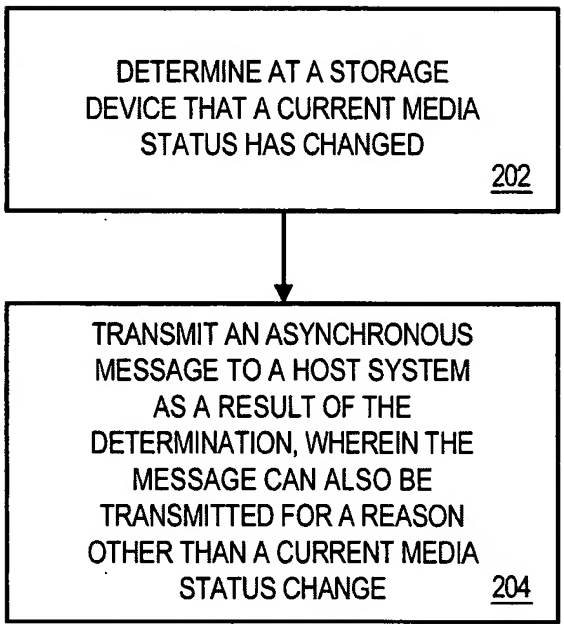
DETERMINE AT A STORAGE DEVICE THAT A CURRENT MEDIA STATUS HAS CHANGED
202
TRANSMIT AN ASYNCHRONOUS MESSAGE TO A HOST SYSTEM AS A RESULT OF THE DETERMINATION, WHEREIN THE MESSAGE CAN ALSO BE TRANSMITTED FOR A REASON OTHER THAN A CURRENT MEDIA STATUS CHANGE
204

FIG. 2

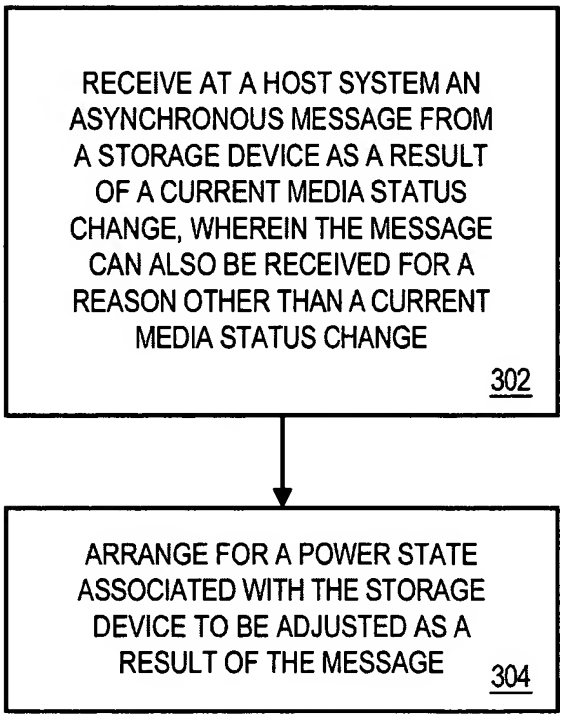
RECEIVE AT A HOST SYSTEM AN ASYNCHRONOUS MESSAGE FROM A STORAGE DEVICE AS A RESULT OF A CURRENT MEDIA STATUS CHANGE, WHEREIN THE MESSAGE CAN ALSO BE RECEIVED FOR A REASON OTHER THAN A CURRENT MEDIA STATUS CHANGE
302
ARRANGE FOR A POWER STATE ASSOCIATED WITH THE STORAGE DEVICE TO BE ADJUSTED AS A RESULT OF THE MESSAGE
304

FIG. 3

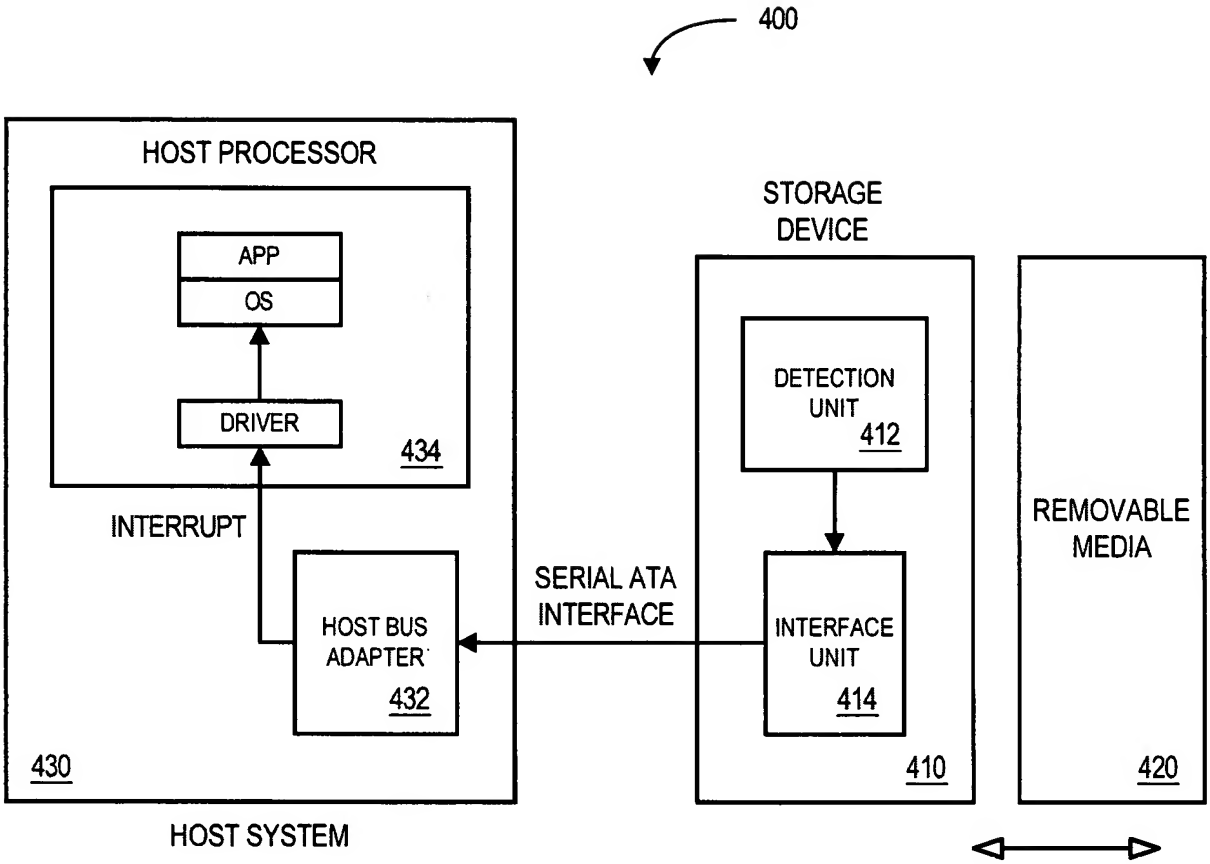
400
HOST PROCESSOR
APP
OS
DRIVER
434
INTERRUPT
HOST BUS ADAPTER
432
430
HOST SYSTEM
SERIAL ATA INTERFACE
STORAGE DEVICE
DETECTION UNIT
412
INTERFACE UNIT
414
410
REMOVABLE MEDIA
420

FIG. 4

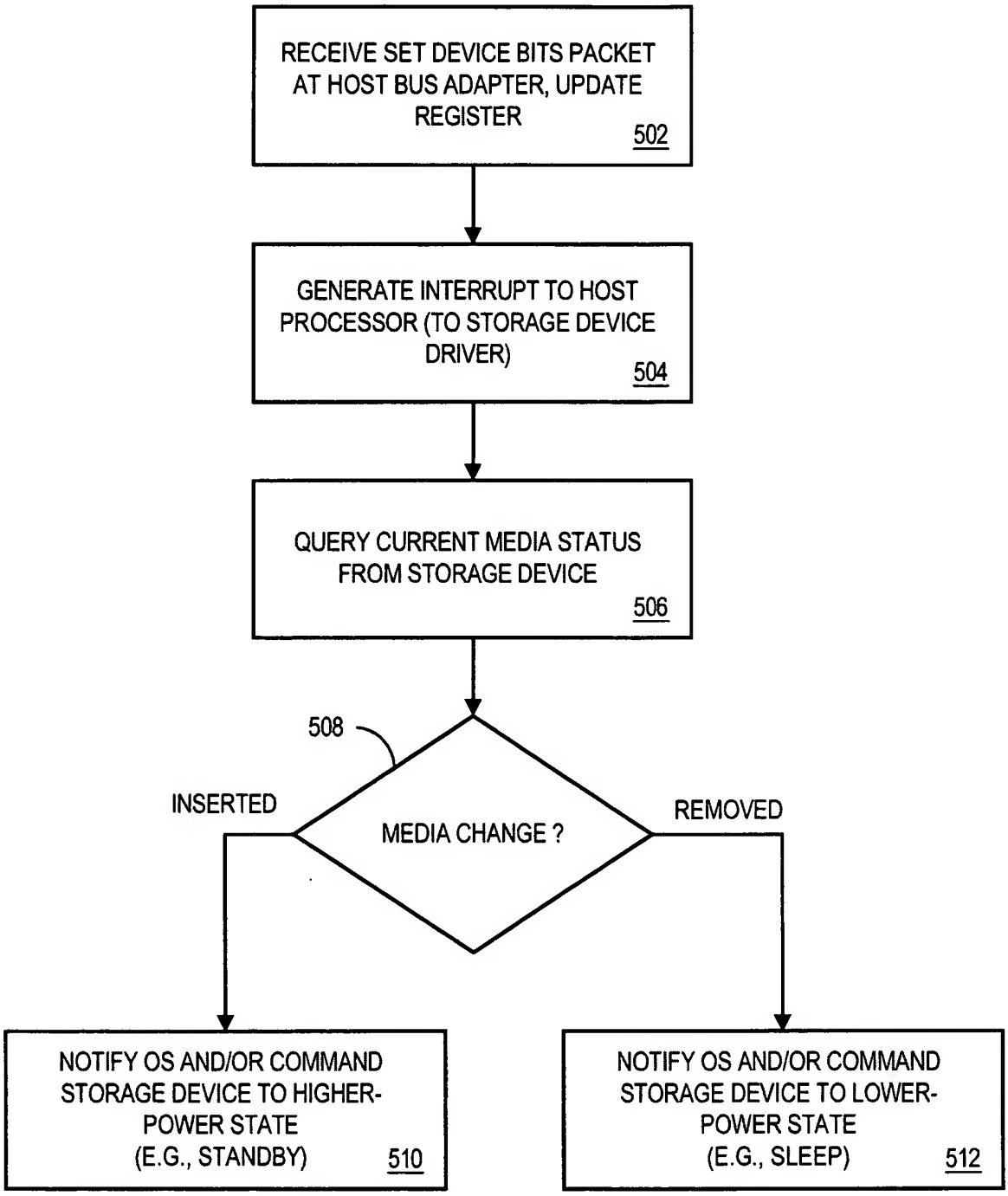
RECEIVE SET DEVICE BITS PACKET AT HOST BUS ADAPTER, UPDATE REGISTER
502
GENERATE INTERRUPT TO HOST PROCESSOR (TO STORAGE DEVICE DRIVER)
504
QUERY CURRENT MEDIA STATUS FROM STORAGE DEVICE
506
508
MEDIA CHANGE ?
INSERTED
REMOVED
NOTIFY OS AND/OR COMMAND STORAGE DEVICE TO HIGHER-POWER STATE (E.G., STANDBY)
510
NOTIFY OS AND/OR COMMAND STORAGE DEVICE TO LOWER-POWER STATE (E.G., SLEEP)
512

FIG. 5

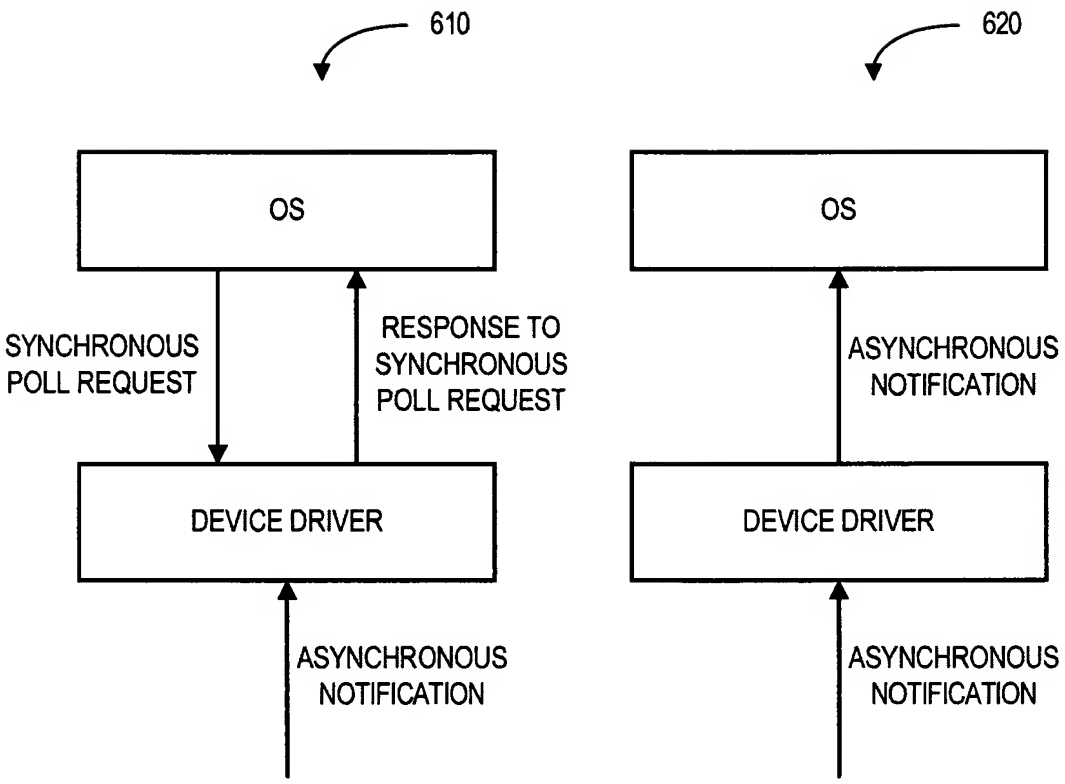
610
620
OS
OS
SYNCHRONOUS POLL REQUEST
RESPONSE TO SYNCHRONOUS POLL REQUEST
ASYNCHRONOUS NOTIFICATION
DEVICE DRIVER
DEVICE DRIVER
ASYNCHRONOUS NOTIFICATION
ASYNCHRONOUS NOTIFICATION

FIG. 6

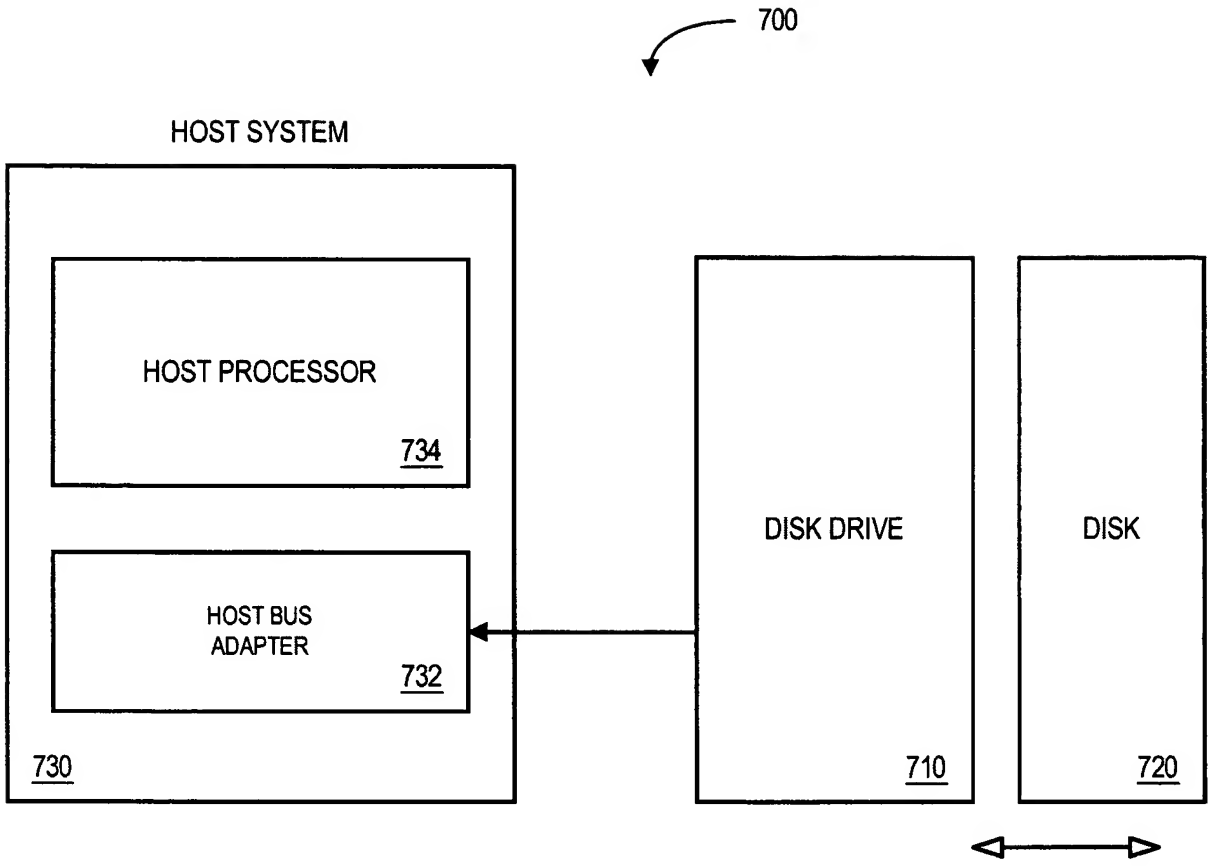
700
HOST SYSTEM
HOST PROCESSOR
734
HOST BUS
ADAPTER
732
730
DISK DRIVE
710
DISK
720

FIG. 7